

# Fourth Industrial Revolution (4IR) Technologies for Sustainable Development in Manufacturing Sector

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## Abstract

Industry 4.0 and fourth industrial revolution (4IR) technologies are hot topics in the current business and technological era. However, very limited studies reported extensive reviews on these two research areas. The purpose of this paper is to give a comprehensive overview of the implications that 4IR technologies have on the Sustainable Development Goals based on the review and the analysis of the available literature. This study uses a literature review approach to find out the current research progress and future research possible of 4IR in terms of application and sustainability implications in the manufacturing sector. The paper is structured to give an insight into the role and impact of different 4IR technologies for manufacturing Sustainable Development Goals, then moves through the implications of new technologies on the Sustainable Development Goals, and finally, points out the areas that need to be addressed. We proposed a framework that identifies the effect of Industry 4.0 technologies on Sustainable Development Goals. This paper just tapped into the potentials and issues that 4IR while leaving room for in-depth research of any of the analyzed areas. The result of the study shows that 4IR has a significant impact on manufacturing sustainability. The findings of this study provide new research scopes and future research directions in different research areas of 4IR which will be valuable for industry and academia in order to achieve manufacturing sustainability with 4IR technologies.

## Keywords:

Fourth Industrial Revolution (4IR), Industry 4.0, Sustainable Development Goals, Manufacturing Sector

## Biographies

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